



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,762	03/18/2005	Shunji Miyahara	122894	1131
25944	7590	08/13/2008	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				HICKS, MICHAEL J
ART UNIT		PAPER NUMBER		
2165				
MAIL DATE		DELIVERY MODE		
08/13/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/525,762	MIYAHARA, SHUNJI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael J. Hicks	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 February 2005.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 February 2005 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 2/28/2005; 1/8/2007; 1/8/2008; 4/17/2008.

- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_ .  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.



## **DETAILED ACTION**

1. Claims 1-27 Pending.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 26-27 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 26-27 recites the limitation "the user" in the final limitation. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-27 rejected under 35 U.S.C. 102(b) as being anticipated by Brewer et al. ("Intelligent Tracking in Manufacturing", Journal of Intelligent Manufacturing Vol. 10, Pages 245-250, Kluwer Academic Publishers, 1999 and referred to hereinafter as Brewer).

As per Claim 1, Brewer discloses an information providing method in which a movable body and a fixed station communicate with each other and the fixed station provides various types of information to the movable body (i.e. “BMW and Vauxhall use *RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process.*” The preceding text excerpt clearly indicates that a movable body (e.g. RFID tag affixed to an object) is in communication with a fixed station (e.g. RFID interface) which provides various types of information (e.g. may read from and write to) the movable body.) (Page 248, Column 1, Paragraph 2), the method being characterized in that the movable body previously registers, in the fixed station, movable-body identification information for identifying the movable body, communication unit identification information for identifying a communication unit which is assembled in the movable body and used for communication with the fixed station, and user identification information for identifying a user who owns the movable body in a mutually related manner (i.e. “BMW and Vauxhall use *RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process.*” The preceding text excerpt clearly indicates that the RFID tag includes the customer order, which will include the customer name (e.g. the owner of the movable body) and the order number (e.g movable body identification). Examiner further notes that the purpose of a RFID tag is to identify itself as a communications unit and therefor the RFID tag is considered to include this functionality.) (Page 248, Column 1, Paragraph 2); and when request information representing request for information provision and at least one of movable-body identification information, communication unit identification information, and user identification information are sent from the movable body, the fixed station authenticates the movable body by

comparing at least one of the movable-body identification information, the communication unit identification information, and the user identification information sent from the movable body with the movable-body identification information, the communication unit identification information, and the user identification information registered in a mutually related manner (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.” The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2), and provides a predetermined piece of information to the movable body on the basis of the request information when the movable body is specified by the authentication (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.” The preceding text excerpt clearly indicates that the reprogramming would include sending the information to the movable body.) (Page 248, Column 1, Paragraph 2).

As per Claim 2, Brewer discloses a first information registration apparatus capable of communicating with the fixed station is disposed at a predetermined first location, and a second information registration apparatus capable of communicating with the fixed station is disposed at a predetermined second location (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.”) The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and that more than one apparatus may be used to program the fixed station.) (Page 248, Column 1, Paragraph 2); and as the movable-body identification information, the communication unit identification information, and the user identification information to be registered in the fixed station in a mutually related manner, the first information registration apparatus registers movable-body identification information issued at the time of manufacture of the movable body and communication unit identification information issued at the time of manufacture of the communication unit in the fixed station in a mutually related manner (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this

system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and that more than one apparatus may be used to program the fixed station. Examiner notes that any information registration device may be used to provide any of the available information to the fixed body.) (Page 248, Column 1, Paragraph 2), and the second information registration apparatus registers user identification information in the fixed station while relating the user identification information with at least one of the movable-body identification information and the communication unit identification information registered in the fixed station in a mutually related manner (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and that more than one apparatus may be used to program the fixed station. Examiner notes that any information registration device may be used to provide any of the available information to the fixed body.) (Page 248, Column 1, Paragraph 2).

As per Claim 3, Brewer discloses when request information representing request for information provision, present location information representing a present location of the movable body, and at least one of movable-body identification information,

communication unit identification information, and user identification information are sent from the movable body (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.” The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may include location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1), the fixed station authenticates the movable body by comparing at least one of the movable-body identification information, the communication unit identification information, and the user identification information sent from the movable body with the movable-body identification information, the communication unit identification information, and the user identification information registered in a mutually related manner (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.” The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the

movable body through a request for information, and that the information may includes location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1), determines whether the movable body is present at the predetermined location on the basis of the present location information sent from the movable body (i.e. “*BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*” The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1), and provides a predetermined piece of information to the movable body on the basis of the request information when the movable body is specified by the authentication and the movable body is determined to be present at the predetermined location (i.e. “*BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*” The preceding text excerpt clearly indicates that

the reprogramming would include sending the information to the movable body.) (Page 248, Column 1, Paragraph 2).

As per Claims 4, 13 and 21, Brewer discloses the communication unit is integrally assembled in the movable body (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process.”) The preceding text excerpt clearly indicates that the RFID tag is integrally assembled in the movable body.) (Page 248, Column 1, Paragraph 2).

As per Claims 5, 14, and 22, Brewer discloses at least one the movable-body identification information and the communication unit identification information is represented by a barcode (i.e. “RF technology has been successfully used in some portions of the supply chain. Copperweld, a Pittsburgh-based steel tubing and wire manufacturer, has taken the first steps toward RFID. They have implemented an infrastructure of RF units to handle a barcode-based inventory system. Through the use of a contactless system to read a variety of barcodes, they have managed to reduce the time needed to complete their original tracking process by two thirds.”) The preceding text excerpt clearly indicates that RFID systems may also include traceable barcodes.) (Page 247, Columns 1-2).

As per Claims 6, 15, and 23 Brewer discloses the movable body is a vehicle (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct

*color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the movable body is a vehicle, although examiner notes that this limitation is considered to be non-functional descriptive material.) (Page 248, Column 1, Paragraph 2).

As per Claims 7, and 16, Brewer discloses the predetermined first location is a plant at which the vehicle is manufactured, and the predetermined second location is a sales shop at which the vehicle is sold (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and that more than one apparatus may be used to program the fixed station. Examiner notes that it is intuitive for the movable body information and the communications information to be entered at the production plant, as those elements are housed at the production plant, and that it is intuitive for the customer information to be entered via network from a sales location, as the customer will not be known until the order is placed.) (Page 248, Column 1, Paragraph 2).

As per Claims 8, 17, and 24 Brewer discloses the movable-body identification information is chassis number information representing a unique chassis number which

is issued at the time of manufacture of the vehicle (i.e. *Examiner notes that the exact information which is stored as movable-body information is considered to be non-function descriptive material and given no patentable weight.*), and the communication unit identification information is composed of unique identification information which is issued by a predetermined organization at the time of manufacture of the communication unit and information representing a phone number previously allotted to the communication unit (i.e. *Examiner notes that the exact information which is stored as communication unit identification information is considered to be non-function descriptive material and given no patentable weight.*).

As per Claim 9, 18, and 25 Brewer discloses the user identification information is composed of vehicle registration number information representing a vehicle registration number which is issued by a predetermined organization at the time of sales of the vehicle, and user ID information and user password information which are issued from the fixed station and used for accessing the fixed station (i.e. *Examiner notes that the exact information which is stored as user identification information is considered to be non-function descriptive material and given no patentable weight.*).

As per Claim 10, Brewer discloses an information providing system in which a movable body and a fixed station communicate with each other and the fixed station provides various types of information to the movable body (i.e. “*BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process.*” The preceding text excerpt clearly indicates that a movable body (e.g. RFID tag

affixed to an object) is in communication with a fixed station (e.g. RFID interface) which provides various types of information (e.g. may read from and write to) the movable body.) (Page 248, Column 1, Paragraph 2), the system being characterized in that the movable body comprises: means for inputting movable-body identification information for identifying the movable body, communication unit identification information for identifying a communication unit which is assembled in the movable body and used for communication with the fixed station, and user identification information for identifying a user who owns the movable body (i.e. *"BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process."*) The preceding text excerpt clearly indicates that the RFID tag includes the customer order, which will include the customer name (e.g. the owner of the movable body) and the order number (e.g. movable body identification) which must have been input at some point. Examiner further notes that the purpose of a RFID tag is to identify itself as a communications unit and therefor the RFID tag is considered to include this functionality.) (Page 248, Column 1, Paragraph 2), and sending means for sending to the fixed station the movable-body identification information, the communication unit identification information, and the user identification information entered by the input means (i.e. *"BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process."*) The preceding text excerpt clearly indicates that the RFID tag includes means to send the stored information to the fixed station.) (Page 248, Column 1, Paragraph 2); and the fixed station comprises: first receiving means for receiving the movable-body identification information, the communication unit identification information, and the user identification information sent from the movable body (i.e. *"BMW and Vauxhall use RFID tags to enable accurate*

*customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information.) (Page 248, Column 1, Paragraph 2), registering means for registering, in a mutually related manner, the movable-body identification information, the communication unit identification information, and the user identification information received by the first receiving means (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information.) (Page 248, Column 1, Paragraph 2), storage means for storing the movable-body identification information, the communication unit identification information, and the user identification information registered by the registering means in a mutually related manner (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer

*order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information. Examiner notes that the received information may be stored.)

(Page 248, Column 1, Paragraph 2), second receiving means for receiving request information representing request for information provision and at least one of movable-body identification information, communication unit identification information, and user identification information sent from the movable body (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2), authentication means for authenticating the movable body by comparing at least one of the movable-body identification information, the communication unit identification information, and the user identification information, received by the second receiving means, with the movable-

body identification information, the communication unit identification information, and the user identification information registered in the storage means in a mutually related manner (i.e. *"BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free."*) The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2), and sending means for sending a predetermined piece of information to the movable body on the basis of the request information received by the second receiving means (i.e. *"BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free."*) The preceding text excerpt clearly indicates that the reprogramming would include sending the information to the movable body.) (Page 248, Column 1, Paragraph 2).

As per Claim 11, Brewer discloses an information providing system in which a movable body and a fixed station communicate with each other and the fixed station provides various types of information to the movable body (i.e. “BMW and Vauxhall use *RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process.*” The preceding text excerpt clearly indicates that a movable body (e.g. RFID tag affixed to an object) is in communication with a fixed station (e.g. RFID interface) which provides various types of information (e.g. may read from and write to) the movable body.) (Page 248, Column 1, Paragraph 2), the system being characterized by comprising: a first information registration apparatus disposed at a predetermined first location and being capable of communicating with the fixed station and a second information registration apparatus disposed at a predetermined second location and being capable of communicating with the fixed station (i.e. “BMW and Vauxhall use *RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*” The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and that more than one apparatus may be used to program the fixed station.) (Page 248, Column 1, Paragraph 2), wherein the first information registration apparatus comprises: input means for inputting movable-body identification information issued at the time of manufacture of the movable body and communication unit identification information issued at the



*the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and that more than one apparatus may be used to program the fixed station. Examiner notes that it is intuitive for the movable body information and the communications information to be entered at the production plant, as those elements are housed at the production plant, and that it is intuitive for the customer information to be entered via network from a sales location, as the customer will not be known until the order is placed.) (Page 248, Column 1, Paragraph 2); the movable body comprises: input means for inputting request information for requesting the fixed station to provide various types of information, and sending means for sending, along with the request information input by the input means, at least one of the movable-body identification information, the communication unit identification information, and user identification information (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly. Examiner notes that instructions and information must be input to the movable body at some point.) (Page 248, Column 1, Paragraph 2); and the fixed station comprises: first receiving means for receiving the movable-body identification



*the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and therefor communication with some information database for loading and storing information is necessitated.) (Page 248, Column 1, Paragraph 2), second receiving means for receiving the request information representing request for information provision and at least one of movable-body identification information, communication unit identification information, and user identification information sent from the movable body (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2), authentication means for authenticating the movable body by comparing at least one of the movable-body identification information, the communication unit identification information, and the user identification information, received by the second receiving means, with the movable-body identification information, the communication unit identification information, and the user identification information registered in the storage means in a mutually related manner (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car

*is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2), and sending means for sending a predetermined piece of information to the movable body on the basis of the request information received by the second receiving means (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2).

As per Claim 12, Brewer discloses an information providing system in which a movable body and a fixed station communicate with each other and the fixed station provides various types of information to the movable body (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is

*programmed with the customer order. The tag is then attached to and travels with the car during the production process.*" The preceding text excerpt clearly indicates that a movable body (e.g. RFID tag affixed to an object) is in communication with a fixed station (e.g. RFID interface) which provides various types of information (e.g. may read from and write to) the movable body.) (Page 248, Column 1, Paragraph 2), the system being characterized by comprising: a first information registration apparatus disposed at a predetermined first location and being capable of communicating with the fixed station and a second information registration apparatus disposed at a predetermined second location and being capable of communicating with the fixed station (i.e. "*BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and that more than one apparatus may be used to program the fixed station.) (Page 248, Column 1, Paragraph 2), wherein the first information registration apparatus comprises: input means for inputting movable-body identification information issued at the time of manufacture of the movable body and communication unit identification information issued at the time of manufacture of the communication unit assembled in the movable body and used for communication with the fixed station, and sending means for sending to the fixed station the movable-body identification information and the communication unit identification information input by the input means (i.e. "*BMW and Vauxhall use RFID tags to*

*enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and that more than one apparatus may be used to program the fixed station. Examiner notes that it is intuitive for the movable body information and the communications information to be entered at the production plant, as those elements are housed at the production plant, and that it is intuitive for the customer information to be entered via network from a sales location, as the customer will not be known until the order is placed.) (Page 248, Column 1, Paragraph 2); the second information registration apparatus comprises: input means for inputting user identification information and at least one of the movable-body identification information and the communication unit identification information, and sending means for sending to the fixed station the user identification information and at least one of the movable-body identification information and the communication unit identification information input by the input (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and

that more than one apparatus may be used to program the fixed station. Examiner notes that it is intuitive for the movable body information and the communications information to be entered at the production plant, as those elements are housed at the production plant, and that the it is intuitive for the customer information to be entered via network from a sales location, as the customer will not be known until the order is placed.) (Page 248, Column 1, Paragraph 2); the movable body comprises: input means for inputting request information for requesting the fixed station to provide various types of information, and sending means for sending the request information input by the input means, present location information representing a present location of the movable body, and at least one of the movable-body identification information, the communication unit identification information, and user identification information (i.e.

*"BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free."* The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information.) (Page 248, Column 1, Paragraph 2; Table 1); and the fixed station comprises: first receiving means for receiving the movable-body identification information and the communication unit identification information sent from the first information registration apparatus and for receiving the user identification information and at least one of the movable-body identification information and the communication unit identification information sent from the second

information registration apparatus (i.e. *"BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free."*) The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and that more than one apparatus may be used to program the fixed station. Examiner notes that any information registration device may be used to provide any of the available information to the fixed body.) (Page 248, Column 1, Paragraph 2), registering means for registering, in a mutually related manner, the movable-body identification information, the communication unit identification information, and the user identification information received by the first receiving means, storage means for storing the movable-body identification information, the communication unit identification information, and the user identification information registered by the registering means in a mutually related manner (i.e. *"BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free."*) The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and therefor communication with some information database for loading and storing information is necessitated.)

(Page 248, Column 1, Paragraph 2), second receiving means for receiving the request information representing request for information provision, the present location information representing the present location of the movable body, and at least one of movable-body identification information, communication unit identification information, and user identification information sent from the movable body (i.e. “BMW and Vauxhall use *RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*” The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1), authentication means for authenticating the movable body by comparing at least one of the movable-body identification information, the communication unit identification information, and the user identification information, received by the second receiving means, with the movable-body identification information, the communication unit identification information, and the user identification information registered in the storage means in a mutually related manner (i.e. “BMW and Vauxhall use *RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option*

*the customer species. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1), determination means for determining whether or not the movable body is present at the predetermined location on the basis of the movable-body present location information received by the second receiving means, and sending means for sending a predetermined piece of information to the movable body on the basis of the request information received by the second receiving means (i.e. "*BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information) and that the reprogramming would include sending the information to the movable body.)

(Page 248, Column 1, Paragraph 2; Table 1).

As per Claim 19, Brewer discloses a fixed station which provides various types of information to a movable body (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process.”) The preceding text excerpt clearly indicates that a movable body (e.g. RFID tag affixed to an object) is in communication with a fixed station (e.g. RFID interface) which provides various types of information (e.g. may read from and write to) the movable body.) (Page 248, Column 1, Paragraph 2), the fixed station comprising: first receiving means for receiving, from the movable body, movable-body identification information and communication unit identification information for specifying the movable body and user identification information for specifying a user of the movable body (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.”) The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2) movable-body-specifying information registering means for registering, in a mutually related manner, the movable-body identification information and the communication unit identification information received by the first receiving means (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process.”)

*This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2); movable-body-specifying information registration database for accumulating and storing the information pieces registered by the movable-body-specifying information registering means (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and therefor communication with some information database for loading and storing information is necessitated.) (Page 248, Column 1, Paragraph 2); user-specifying information registering means for registering the user identification information received by the first receiving means, while relating the user identification information with at least one of the movable-body identification information and the communication unit identification information (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This

*tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2); user-specifying information registration database for accumulating and storing the information pieces registered by the user-specifying information registering means; contents data base for storing contents information to be provided to the user (i.e. "*BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and therefor communication with some information database for loading and storing information is necessitated.) (Page 248, Column 1, Paragraph 2); second receiving means for receiving request information representing request for the contents information and at least one of movable-body identification information, communication unit identification information, and user identification information sent from the movable body (i.e. "*BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the*

*production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2), authentication means for authenticating the movable body by comparing at least one of the movable-body identification information, the communication unit identification information, and the user identification information, received by the second receiving means, with the movable-body identification information and the communication unit identification information stored in the movable-body-specifying information registration database, and the user identification information registered in the user-specifying information registration database (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2); and sending means for sending the contents information stored in the

contents database (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.” The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2).

As per Claim 20, Brewer discloses a fixed station which provides various types of information to a movable body (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process.” The preceding text excerpt clearly indicates that a movable body (e.g. RFID tag affixed to an object) is in communication with a fixed station (e.g. RFID interface) which provides various types of information (e.g. may read from and write to) the movable body.) (Page 248, Column 1, Paragraph 2), the fixed station comprising: first receiving means for receiving, from the movable body, movable-body identification information and communication unit identification information for specifying the movable body and user identification information for specifying a user of the movable body (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct

*color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2); movable-body-specifying information registering means for registering, in a mutually related manner, the movable-body identification information and the communication unit identification information received by the first receiving means (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2); movable-body-specifying information registration database for accumulating and storing the information pieces registered by the movable-body-specifying information registering means (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model,

*interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and therefor communication with some information database for loading and storing information is necessitated.) (Page 248, Column 1, Paragraph 2); user-specifying information registering means for registering the user identification information received by the first receiving means, while relating the user identification information with at least one of the movable-body identification information and the communication unit identification information (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2); user-specifying information registration database for accumulating and storing the information pieces registered by the user-specifying information registering means (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the

*customer species. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and therefor communication with some information database for loading and storing information is necessitated.) (Page 248, Column 1, Paragraph 2); contents database for storing contents information to be provided to the user (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the fixed station must be programmed with information at some point, and therefor communication with some information database for loading and storing information is necessitated.) (Page 248, Column 1, Paragraph 2); second receiving means for receiving request information representing request for the contents information, movable body present location information, and at least one of movable-body identification information, communication unit identification information, and user identification information sent from the movable body (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete

*system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1), authentication means for authenticating the movable body by comparing at least one of the movable-body identification information, the communication unit identification information, and the user identification information, received by the second receiving means, with the movable-body identification information and the communication unit identification information stored in the movable-body-specifying information registration database, and the user identification information registered in the user-specifying information registration database (i.e. "*BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are:* \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* *Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1); determination means for determining whether or not the movable body is present at the predetermined location on the basis of the movable-body present location information received by the second receiving

means (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.” The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may include location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1); and sending means for sending the contents information stored in the contents database (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.” The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may be reprogrammed on the fly.) (Page 248, Column 1, Paragraph 2).

As per Claim 26, Brewer discloses an information obtaining apparatus for obtaining various types of information from a fixed station, the information obtaining

apparatus comprising: input means for inputting identification information for receiving authentication at the fixed station and for inputting a request for requesting the fixed station to provide the various types of information (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.”) The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may include location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1); communication means for sending the information pieces input by the input means and for receiving the various types of information from the fixed station (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.”) The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may include location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1); storage means

for storing the various types of information received by the communication means (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.”) The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may include location information (e.g. tracking information.) (Page 248, Column 1, Paragraph 2; Table 1); and display means for displaying for the user the various types of information stored in the storage means (i.e. Examiner notes that as the information is stored, and may be read, it may also be displayed using means common to the art.).

As per Claim 27, Brewer discloses an information obtaining apparatus for obtaining various types of information from a fixed station, the information obtaining apparatus comprising: input means for inputting identification information for receiving authentication at the fixed station and for inputting a request for requesting the fixed station to provide the various types of information (i.e. “BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system.

*\* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1); present location detecting means for detecting a present location (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer species. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system.

*\* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free.*" The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information).) (Page 248, Column 1, Paragraph 2; Table 1); communication means for sending the information pieces input by the input means and information representing the present location detected by the present location detecting means, and for receiving the various types of information from the fixed station (i.e. "BMW and Vauxhall use RFID tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer species. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on

the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information.) (Page 248, Column 1, Paragraph 2; Table 1); storage means for storing the various types of information received by the communication means (i.e. "BMW and Vauxhall use *RFID* tags to enable accurate customization of individual customer orders. A read/write smart tag is programmed with the customer order. The tag is then attached to and travels with the car during the production process. This tracking ensures that the car is manufactured with the correct color, model, interior, and any other option the customer specifies. Some of the major advantages cited for this system are: \* Read without direct line of sight. \* Reprogrammed to reflect different requirements. \* Integrated into a complete system. \* Reused at the end of assembly. \* Used under harsh conditions because they are maintenance-free and battery-free." The preceding text excerpt clearly indicates that the information on the chip is authenticated at each stage of the manufacturing to authenticate the information with existing information about the movable body through a request for information, and that the information may includes location information (e.g. tracking information.) (Page 248, Column 1, Paragraph 2; Table 1); and display means for displaying for the user the various types of information stored in the storage means (i.e. *Examiner notes that as the information is stored, and may be read, it may also be displayed using means common to the art.*).

6. Claim 26 rejected under 35 U.S.C. 102(b) as being anticipated by Rozmanith et al. (U.S. Patent Number 5,253, 341).

As per Claim 26, Rozmanith et al. discloses an information obtaining apparatus for obtaining various types of information from a fixed station, the information obtaining

apparatus comprising: input means for inputting identification information for receiving authentication at the fixed station and for inputting a request for requesting the fixed station to provide the various types of information (i.e. "*In accordance with the present invention, a method for data retrieval from a remote server comprising the following steps and displaying said data is disclosed. The invention comprises the following steps: formulating a query via a data input means and transmitting said query to remote query and data processing means; transmitting said query from said remote query and data processing means to a remote host via input/output means; receiving a compressed or non-compressed response to said query at said remote query and data retrieval system from said remote host via said input/output means; decompressing, said query if compressed; and displaying and optionally providing audio for a presentation corresponding to said query results on a output means... After being cleared via an appropriate security check (e.g. subscriber password), the server 11 may initiate an AV (Audio-Visual) response to the EUS 10.*" The preceding text excerpt clearly indicates that a request for information is transmitted to a fixed station along with authentication information.) (Column 2, Lines 49-63; Column 5, Lines 14-17); communication means for sending the information pieces input by the input means and for receiving the various types of information from the fixed station (i.e. "*In accordance with the present invention, a method for data retrieval from a remote server comprising the following steps and displaying said data is disclosed. The invention comprises the following steps: formulating a query via a data input means and transmitting said query to remote query and data processing means; transmitting said query from said remote query and data processing means to a remote host via input/output means; receiving a compressed or non-compressed response to said query at said remote query and data retrieval system from said remote host via said input/output means; decompressing, said query if compressed; and displaying and optionally providing audio for a presentation corresponding to said query results on a output means.*" The preceding text excerpt clearly indicates that the fixed station (e.g. remote server) is accessed and data is retrieved.) (Column 2, Lines 49-63); storage means for storing the various types of information

received by the communication means (i.e. "*In accordance with the present invention, a method for data retrieval from a remote server comprising the following steps and displaying said data is disclosed. The invention comprises the following steps: formulating a query via a data input means and transmitting said query to remote query and data processing means; transmitting said query from said remote query and data processing means to a remote host via input/output means; receiving a compressed or non-compressed response to said query at said remote query and data retrieval system from said remote host via said input/output means; decompressing, said query if compressed; and displaying and optionally providing audio for a presentation corresponding to said query results on a output means.*" The preceding text excerpt clearly indicates that the data is stored, at least temporarily at the local system.) (Column 2, Lines 49-63); and display means for displaying for the user the various types of information stored in the storage means (i.e. "*In accordance with the present invention, a method for data retrieval from a remote server comprising the following steps and displaying said data is disclosed. The invention comprises the following steps: formulating a query via a data input means and transmitting said query to remote query and data processing means; transmitting said query from said remote query and data processing means to a remote host via input/output means; receiving a compressed or non-compressed response to said query at said remote query and data retrieval system from said remote host via said input/output means; decompressing, said query if compressed; and displaying and optionally providing audio for a presentation corresponding to said query results on a output means.*" The preceding text excerpt clearly indicates that the data may be displayed at the loacal system.) (Column 2, Lines 49-63).

### **Points of Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Hicks whose telephone number is (571) 272-2670. The examiner can normally be reached on Monday - Friday 9:00a - 5:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on (571) 272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J Hicks  
Art Unit 2165  
Phone: (571) 272-2670  
Fax: (571) 273-2670

/Christian P. Chace/  
Supervisory Patent Examiner, Art Unit 2165